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[54] **METHOD OF FABRICATING AND PATTERNING OLEDS**[75] Inventors: **Paul Burrows**, Princeton Junction; **Stephen R. Forrest**; **Peifang Tian**, both of Princeton, all of N.J.[73] Assignee: **The Trustees of Princeton University**, Princeton, N.J.[21] Appl. No.: **08/977,205**[22] Filed: **Nov. 24, 1997**[51] Int. Cl.⁷ **H01L 29/12**[52] U.S. Cl. **438/22**; 438/23; 438/34; 438/35; 438/99; 257/40; 257/79; 257/88

[58] Field of Search 438/22, 23, 28, 438/29, 34, 35, 99; 257/12, 13, 40, 88, 89, 90, 96, 97, 100, 79

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[57]

ABSTRACT

A multiple layer patterning system with an undercut allows the deposition of a material onto a substrate from a direction substantially perpendicular to the substrate, followed by the angular deposition of a protective cap. Because of the angular deposition, the protective cap extends into the undercut and completely covers and surrounds any previously exposed surface of the material. The material is thereby protected from subsequent exposure to substances that may be deleterious.

19 Claims, 10 Drawing Sheets

